

Application No. 10/822581
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Amendment
Attorney Docket No. S63.2B-10865-US01

Remarks

Claims 1-8, 10-13 and 39-44 are now pending. Claims 1, 12 and 41 are now in independent form. No new matter has been added.

Claim 43 has been amended to use the same sentence structure as is used in claims 39 and 40. No change in scope is intended.

The amendments made herein are submitted without prejudice to submission in a continuing application of claims to the same or similar subject matter previously presented.

The amendments are properly submitted after Final Rejection in view of the fact that a new reference, Boer et al, was cited for the first time in the Final Action.

Claim Rejections - 35 USC §112

Claim 44 has been rejected for reciting a method rather than a laminate. The error was inadvertent. Amended claim 44 is now properly dependent on the antecedent claim 41. Withdrawal of the rejection is therefor respectfully requested.

Claim Rejections - 35 USC §102

Claim 30 has been rejected as anticipated by Wang et al, US 5,195,969 or Samuelson et al, US 6,464,683. The rejection is moot in view of the cancellation of claim 30.

Claims 1-12, 30-37, 39-40 and 43 have been rejected as anticipated by US 6,355,358, Boer et al. The rejection is traversed.

Claim 1 has been amended to recite that the coupling agent is selected from the group consisting of polyepoxides, polyoxazalines, polycarbodiimides, and polyisocyanates.

Claim 9 has been cancelled in light of this amendment to claim 1.

The Boer adhesion promoter layer is not formed using any of these compounds. Withdrawal of the rejection as to claims 1-8 and 10-11 is therefore respectfully requested.

Claim 12 has been written in independent form. The Boer et al patent contains no suggestion to use a catalyst as recited in claim 12. This is recognized in item 10, page 6 of the Final Action. Withdrawal of the anticipation rejection of claims 12-13 is therefore respectfully requested.

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Application of the anticipation rejection on Boer et al to claim 43 is traversed. Claim 43 depends from claim 41, which has now been written in independent form. Claim 41 recites a catalyst. The Boer et al patent contains no suggestion to use a catalyst as recited in claim 41. This is recognized in item 10, page 6 of the Final Action and in the fact that claim 41 was not rejected as anticipated by Boer et al. Withdrawal of the anticipation rejection of claim 43 is therefore respectfully requested.

Claims 39 and 40 have now been amended to depend from claim 41. Therefore withdrawal of the anticipation rejection of those claims is also requested.

Claim Rejections - 35 USC §103

Claims 1-13 have been rejected as obvious from Wang or Samuelson, either one taken with Shimura et al, US 5,441,488. The rejection is traversed.

Claim 1 recites the coupling agent is selected from the group consisting of polyepoxides, polyoxazalines, polycarbodiimides, and polyisocyanates. The Examiner does not assert that Plexar® polymers are modified with any of these coupling agents or that any of the applied references would otherwise lead to use of such. Therefore the combination cannot render obvious the invention of claim 1 and claims 2-8 and 11 which depend therefrom.

Claim 12 recites the use of a catalyst in the tie layer. The Final Action asserts that it would have been obvious to employ a catalyst as taught by Shimura in the tie layer of Wang or Samuelson. The Examiner has clearly misunderstood Shimura.

Shimura's teachings pertain to the use of a catalyst in the water swellable polymer, i.e. the outer layer, not in the acid-anhydride containing polymer. See e.g. Example 12. Moreover the outer layer containing the catalyst is deposited from a solution, not a melt, so the conditions of use are not analogous to the conditions of preparation of the claimed tie-layer. There is no suggestion whatsoever in Shimura to use a tertiary amine, or any other catalyst, in the formation of the acid-anhydride material, whether employed as matrix material or as an intermediate layer.

If properly combinable, Shimura might arguably lead one to incorporate the catalyst into a first or second polymer layer. However, there is no teaching to include a catalyst in a tie layer. Consequently, the assertion that the skilled person would have been led by this reference to employ a catalyst in the tie layer of Wang or Samuelson can only have been conceived with

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improper hindsight.

At least for the reason that Shimura does not teach or suggest using a catalyst in a tie layer or a layer analogous thereto, the invention of claims 12 and 13 is not rendered obvious by the combination of Shimura with either Wang or Samuelson.

Claims 12-13, 38, and 41-42 have been rejected as obvious from Boer et al taken with Shimura. This rejection is also traversed.

Applicant again points out that Shimura's catalyst is put into an outer layer produced by applying a solvent solution of catalyst and outer layer polymer onto an acid-anhydride polymer substrate. There is no teaching to incorporate the catalyst into the acid-anhydride polymer substrate or layer. Therefore, if properly combinable, Shimura might arguably have lead one to incorporate the catalyst into Boer et al's layer I or layer II, but there is no teaching that would have led to its use in the adhesion promoter material therebetween.

Examiner's Response to Arguments

After reflection, the applicant concurs that in the context of the present invention, "the polymer" can be taken to encompass different structural grades of polymer made from the same monomer(s). To the extent that the arguments in the previous amendment assert to the contrary they are withdrawn.

Regarding the assertion that it would be obvious from Shimura to employ high amounts of coupling agent in a tie-layer as claimed, the applicant continues to disagree. The Examiner's assertion fails to take into account that significant polymer degradation effects can also occur under post-polymerization modifications. See page 3 lines 21-25 of the application. In view of the amendments presented herein, however, this disagreement is believed to be moot.

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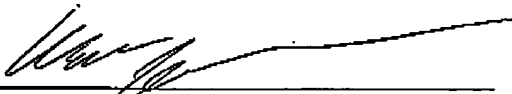
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Conclusion

Claims 1-8, 10-13 and 39-44 include coupling agent and/or catalyst recitations that clearly distinguish the invention from the cited references. Other informalities have been removed. Therefore, with entry of the amendments, the application will be in condition for allowance. Early and favorable action thereon is respectfully requested.

Respectfully submitted,
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